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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/453,509	12/03/1999	ANTHONY BEVERINA	8594-001-64	2741

7590 09/15/2005

Supervisor Patent Prosecution  
PIPER RUDNICK LLP  
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Washington, DC 20036-2412

EXAMINER
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PHAN, THAI Q

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/453,509

Applicant(s)

BEVERINA ET AL.

Examiner

Thai Q. Phan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12,44 and 47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12,44 and 47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Office Action is in response to applicants' amendment for application S/N: 09/453,509, filed on 08/19/2005. Due to applicants' amendment and arguments to the claimed invention, the finality was withdrawn. Claims 1-12, 44, and 47 are pending in the action.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The cited feature "mostly likely" in the claim makes it indefinite for failing to point out the precise meaning of the cited feature.

The cited "weapon/delivery point" is unclear for what it represents for.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

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351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12, 44 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Bergman et al, US patent no. 6,442,694.

As per claim 1, Bergman anticipates a method and apparatus (system) for modeling and isolating faults in a communication network with feature limitations very identical to the claimed invention. According to Bergman, the system (apparatus) includes

Hardware requirements such as a system memory, an input device, a display device, system processor coupled between them for processing input data,

Means for inputting information about a site of potential attacks (terrorize or local attacks) (cols. 14-24),

Means for constructing a model of the location or site based on input from the user (col. 18, line 18 to col. 19, line 8, for example),

Accepting information from the threat and determining an accessibility of the site to the threat of attack (cols. 18-20),

Determining a probability and detection rate for the local attack or at the delivery point such as network nodes, fatigue components, applications, network flows, capability, etc, based in part on a trigger event (cols. 10-12), and

Calculating a risk based on the accessibility and probability of failure occurrence or fault detection as claimed.

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As per claim 2, Bergman anticipates the Bayesian analysis techniques can be used to calculate consequence and taken actions as claimed (col. 7, lines 1-62, for example).

As per claim 3, Bergman anticipates action models and various consequences in the analysis.

As per claims 4-6, Bergman anticipates the claimed limitations for attack detection and faults propagation like threat vector as claimed.

As per claim 7, Bergman anticipates a method and apparatus (system) for modeling and isolating faults in a communication network with feature limitations very identical to the claimed invention. According to Bergman, the method includes steps and means:

Hardware requirements such as a system memory, an input device, a display device, system processor coupled between them for processing input data,

Means for inputting information about a site of potential attacks (terrorize or local attacks) (cols. 14-24),

Means for constructing a model of the location or site based on input from the user (col. 18, line 18 to col. 19, line 8, for example),

Accepting information from the threat and determining an accessibility of the site to the threat of attack (cols. 18-20),

Determining a probability and detection rate for the local attack or at the delivery point such as network components such as network nodes, fatigue components,

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applications, network flows, capability, etc, based in part on a trigger event (cols. 10-12), and

Calculating a risk based on the accessibility and probability of failure occurrence or fault detection as claimed.

As per claims 8-12, due to the similarity of claims 8-12 to claims 2-6 above, claims 8-12 are also rejected in like manner.

As per claims 44 and 47, Bergman anticipates attack events and fault occurrences with historical data or causality for attack analysis (cols. 6-8).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-12, 44 and 47 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***


1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  1. US patent no. 5,020,411, issued to Rowan, Larry, on June 1991
  2. US patent no. 6,823,068, issued to Samid, Gideon, on Nov. 2004
  3. US patent application publication no. 2005/0172155 A1, issued to Sheymov, Victor, on Aug. 2005
  4. US patent application publication no. 2005/0183072 A1, issued to Horning et al, on Aug. 2005

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Phan whose telephone number is 571-272-3783. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean Homere can be reached on 571-272-3780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sept. 12, 2005

  
Thai Phan  
Patent Examiner